PERCEPTUALLY WEIGHTED SPEECH CODER

ABSTRACT OF THE DISCLOSURE

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A perceptually weighted speech coder system samples a speech signal and determines its pitch. The speech signal is characterized as fully voiced, partially voiced or weakly voiced. A Lloyd-Max quantizer is trained with the pitch values of those
10   speech signals characterized as being substantially fully voiced. The quantizer quantizes the trained fully voiced pitch values and the pitch values of the non-fully voiced speech signals. The quantizer can also quantize gain values in a similar manner. Sampling is increased for fully-voice signals to improve coding accuracy. This limits application to non-real time speech storage. Mixed excitation is used to synthesize the speech signal